California Water Plan Update 2003 & Beyond

California Bay-Delta Authority
Water Supply Subcommittee
November 12, 2003

New Planning Framework

- 65-member Public Advisory Committee
- Water Portfolios using 1998, 2000, 2001 data
- Regional Reports reflecting regional goals & plans
- Multiple <u>Scenarios</u> to account for future uncertainties and risks
- Many <u>Strategies</u> to help meet future demands

Issues & Challenges

- Significant data and information gaps
- Modeling tools are not fully developed
- Revising the process impacted schedule
- Reduced staff & budget for Update 2003
- Lack of consensus on new surface storage as a future strategy

Phased Work Plan

· 2003

- Public Review <u>Draft</u> of Update 2003
- Narratives of four 2030 Future Scenarios
- Short & Long-term Work Plan for Data & Tools

2004

- Public Comment & Release Final Update 2003
- Select methods to quantify 2030 Scenarios

2005 (Begins Update 2008)

Conduct Quantitative Studies for 2030 Scenarios

Water Plan – Bay Delta Program Linkages

- State's ROD Commitments in Update 2003
- Common Regional Reports on Integrated Regional Planning & Implementation
- Common Assumptions & Estimates
- Common Data & Analytical Tools
- Common Stakeholders

Key Recommendations for the Future

- State promote & assist Regionally-based, Integrated, Multi-resource planning
- Locals improve coordination of land use planning & water management
- Diversify Regional Portfolios using 25 resource management strategies
- Reduce uncertainty by filling data/tool gaps

Four Volumes of Update 2003

- Vol. 1 Strategic Plan
 - Findings, Recommendations & Implementation
- Vol. 2 12 Regional Reports
 - 10 Hydrologic Regions, Mt. Counties & Delta
- Vol. 3 Reference Guide
 - Supplemental articles
- Vol. 4 Technical Guide (Electronic Only)
 - Documentation for data, methods & tools

Volume 1 – Strategic Plan

- Foreword & Users Guide
- Executive Summary
- Ch 1 Overview (Key Recommendations)
- Ch 2 CA Water Today (Statewide View)
- Ch 3 Planning for an Uncertain Future
- Ch 4 Regional Integrated Resource Plng
- Ch 5 State Role & Responsibilities
- Ch 6 Implementation & Funding
- Appendix Resource Management Strategies

Resource Management Strategies

(Definition, Current Level, 2030 Potential & Cost, Benefits, Issues & Recommendations)

- 1. Agricultural Use Efficiency
- 2. Aquifer Remediation
- 3. Conjunctive Management
- 4. Conveyance
- 5. Desalination
- 6. Drinking Water Treatment & Distribution
- 7. Economic Incentives Policy
- 8. Ecosystem Restoration
- 9. Floodplain Management
- 10. Matching Water Quality to Use
- 11. Pollution Prevention
- 12. Precipitation Enhancement

- 13. Recharge Area Protection
- 14. Recycled Municipal Water
- 15. Surface Storage Bay-Delta Program
- 16. Surface Storage –Region/Local
- 17. System Reoperation
- 18. Urban Land Use Management
- 19. Urban Runoff Management
- 20. Urban Water Use Efficiency
- 21. Water-Dependent Recreation
- 22. Water Transfers
- 23. Watershed Management
- 24. Working Lands Management
- 25. Other Strategies (R&D)

Estimates for Additional Water Demands by 2030

- To accommodate 17 million more Californians
 - Additional 2 3 million acre-feet
- To recover Groundwater Overdraft
 - Additional 1 2 million acre-feet
- To restore the Environment
 - More is required (range is being estimated)
- To maintain Irrigated Agriculture
 - About the same as now

Se	ot. 30 Draft
	Work in
F	Progress

Resource Management Strategy

Potential Water Benefits by 2030 (Million Acre-Ft)

Cost (\$ Billion)

Implementation

High Implementation Confidence 0.2 - 0.5

Being Developed Agricultural Water Use Efficiency Conjunctive Management 0.5 1.3 Desalination (brackish water) 0.2 Being Developed

1.2 8.0 Recycled Municipal Water

Urban Water Use Efficiency 1.5 - 2.0Being Developed

Water Transfers 0.3 - 0.7Being Developed

Investment **Guide to Meet 2030** Water **Demands**

	0.0 0		
Medium Implementation Confidence			
Additional Desalination (ocean water)	0.2	0.8 – 1.3	
Precipitation Enhancement	0.3 – 0.4	0.6 – 0.7	
Additional Recycled Municipal Water	0.3	3.0	
Surface Storage – CALFED/State	0.3 – 1.0	2.9 - 5.7	
Additional Urban Water Use Efficiency	0.5	Being Developed	
System Reoperation	0.1 – 0.3	Unknown	
Additional Water Transfers	0.4	Unknown	

Lower Implementation Confidence Additional Agricultural WUE including RDI, 1.0 Being Developed and new technologies 1.0 Unknown Additional Conjunctive Management Additional Surface Storage Unknown Unknown

Water Plan Update 2003

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